

WHAT IS CLAIMED IS:

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1. An optical pickup device comprising:  
a light source that emits light onto an  
object;

a plurality of light receiving members that  
10 receive divided reflection light from the object; and  
a signal processing circuit that converts a  
current signal outputted from each of the plurality of  
light receiving members into a voltage signal, performs  
an adding operation on the voltage signals, and performs  
15 attenuation on the added voltage signal.

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2. The optical pickup device as claimed in  
claim 1, further comprising a complementary signal  
generating circuit that generates a complementary signal  
of the added voltage signal by attenuating a signal that  
has a waveform symmetrical to the added voltage signal  
25 about a predetermined reference voltage.

3. An optical pickup device comprising:  
a light source that emits light onto an  
object;

a plurality of light receiving members that  
5 receive divided reflection light from the object;

a signal processing circuit that converts a  
current signal outputted from each of the plurality of  
light receiving members into a voltage signal, and  
performs an adding operation on the voltage signals; and

10 a complementary signal generating circuit that  
generates a complementary signal of the added voltage  
signal by performing a predetermined level shift on a  
signal that has a waveform symmetrical to the added  
voltage signal about a predetermined reference voltage.

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4. The optical pickup device as claimed in  
20 claim 3, wherein

the signal processing circuit comprises:

a plurality of I/V converters, each of which  
converts the current signal outputted from a  
corresponding one of the light receiving members into  
25 the voltage signal; and

an adder that adds up the voltage signals, and  
the complementary signal generating circuit  
comprises:

an inversion circuit that receives the added  
5 voltage signal outputted from the signal processing  
circuit, and generates the signal that has the waveform  
symmetrical to the added voltage signal about the  
predetermined reference voltage; and

a shift circuit that generates the  
10 complementary signal by performing the predetermined  
level shift on the signal generated by the inversion  
circuit.

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5. The optical pickup device as claimed in  
claim 3, wherein.

the signal processing circuit comprises:

20 a plurality of I/V converters, each of which  
converts the current signal outputted from each of the  
light receiving members into the voltage signal; and

an adder that adds up each voltage signal, and  
the complementary signal generating circuit

25 comprises:

an inversion adder that generates a signal having the waveform symmetrical to the added voltage signal about the predetermined reference voltage; and

a shift circuit that generates the  
5 complementary signal by performing the predetermined level shift on the signal generated by the inversion adder.

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6. The optical pickup device as claimed in claim 3, wherein:

the signal processing circuit further performs  
15 an attenuation operation on the added voltage signal;  
and

the complementary signal generating circuit comprises an attenuator that attenuates the complementary signal.

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7. An information reproduction/recording  
25 apparatus that can optically perform either one or both

of information reproduction and recording on a recording medium, said apparatus comprising:

an optical pickup device that includes a light source for emitting light onto the recording medium, and  
5 a plurality of light receiving members that receive divided reflection light from the recording medium;

a moving device that moves the optical pickup device;

a detector unit that detects an irradiation  
10 spot of the light on the recording medium;

a control unit that controls the irradiation spot to follow a read or write position on the recording medium based on a result of the detection by the detector unit; and

15 a reproduction unit that is disposed independently of the optical pickup device, and is connected to the optical pickup device by a transmission path for transmitting and receiving a voltage signal outputted from a signal processing circuit and a  
20 complementary signal generating circuit, so as to reproduce information stored in the recording medium based on the voltage signal outputted from the signal processing circuit.

8. An information processing apparatus provided with an information reproduction/recording apparatus comprising:

an optical pickup device that includes a light  
5 source for emitting light onto a recording medium, and a plurality of light receiving members that receive divided reflection light from the recording medium;

a moving device that moves the optical pickup device;

10 a detector unit that detects an irradiation spot of the light on the recording medium;

a control unit that controls the irradiation spot to follow a read or write position on the recording medium based on a result of the detection by the  
15 detector unit; and

a reproduction unit that is disposed independently of the optical pickup device, and is connected to the optical pickup device by a transmission path for transmitting and receiving a voltage signal  
20 outputted from a signal processing circuit and a complementary signal generating circuit, so as to reproduce information stored in the recording medium based on the voltage signal outputted from the signal processing circuit,

25 wherein various information processing

operations can be performed.